



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/813,974

03/31/2004

Christopher A. Huey

41698-1116

5910

41881

7590

03/19/2008

BRANDON N. SKLAR, ESQ. (PATENT PROSECUTION)

KAYE SCHOLER, LLP

425 PARK AVENUE

NEW YORK, NY 10022-3598

EXAMINER

NGUYEN, KHAI N

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

03/19/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/813,974	Applicant(s) HUEY, CHRISTOPHER A.	
	Examiner KHAI N. NGUYEN	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on December 14, 2007 has been entered. Claim 21 has been amended. No claims have been canceled. New claims 39-42 have been added. Claims 1-42 are still pending in this application, with claims 1, **21**, and 39 being independent.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The newly added claims 39-42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 39-42 (newly added claims) are rejected under 35 U.S.C. 101 because these claims recite nothing more than a manipulation of data or merely recite a disembodied database, in a form of an algorithm steps and they did not include any tangible routing/switching hardware equipment or network references. The algorithm of claims 39-42 appear to be an abstract idea, given that it does not produce any kind of a useful, concrete, and tangible result. The recited process must somehow apply, involve, use, or advance the technological arts.

The recited methods of claims 39-42 do not apply, involve, or use the technological arts since all of the recited steps can be performed in the mind of a

user/person or by the use of a pencil and paper. The claimed invention, as a whole, is not within the technological arts as explained above claims 39-42 are deemed to be directed to non-statutory subject matter. In addition, the specification states all of the functions of claims 39-42 can be realized by software (i.e., programmed processor), which is non-statutory subject matter (See instant application's specification page 20 lines 16-21).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 41-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 41 (newly added claims) recites the feature "- - - operator comprises at least one processor"; and claim 42 (newly added claim) recites the feature "- - - operator comprises at least one software application". Claims 41-42 are the dependent claims of claim 39, and claim 39 recites the feature "- - - operator capable of communicating with the caller by voice". Therefore, it is unclear whether the processor or the software application can communicate with the caller by voice.

Claim Rejections - 35 USC § 102

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-5, 7-13, 16-23, 25-31, and 34-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Schaffer et al. (U.S. Patent No. 6,385,312 hereinafter "Schaffer").

Regarding claim 1, Schaffer teaches a method for routing a call (Fig. 2 Routing Network) from a communications device to a call center, comprising:

receiving the call (Fig. 27, 110 CALLING, col. 38 lines 25-26, Figs. 28A-28B) at a first call center (Fig. 27, Fig. 30, col. 38 lines 49-51), the call being routed to the first call center based on a communications device identifier (Fig. 2, Fig. 27, 111 Switch, 150a Service Location, 1130 Interactive Voice Response Unit (IVRU), col. 38 lines 49-67 through col. 39 lines 1-4, i.e. call being routed to call center based on Automatic Number Identification (ANI));

determining the geographic vicinity of the communications device (Fig. 27, 1136, 1138, col. 39 lines 33-40, i.e. Bellcore's Vertical & Horizontal Coordinate file and Local Exchange Routing Guide (LERG), and Figs. 39A-B, state 1452, col. 51 lines 27-30. i.e. latitude and longitude); and

routing the call to a second call center if that second call center is closer to the geographic vicinity of the communications device than the first call center (Fig. 27, 150a-150b, col. 39 lines 1-4, and col. 52 lines 2-6).

Regarding claims 2 and 22, Schaffer teaches a method and a system wherein the communications device identifier is automatic number identification (ANI) (Fig. 27, 110, 111, col. 38 lines 28-29, and lines 49-51, Fig. 30, 110, 111, col. 40 – lines 66-67 through col. 41 lines 1-3, i.e. Automatic Number Identification (ANI)).

Regarding claim 3, Schaffer teaches a method further comprising receiving a signaling stream associated with the call, the signaling stream including at least a caller location identifier or an initiating switch locator for respectively identifying the geographic vicinity of the caller or a switch through which the call is initially being routed (col. 10 lines 45-49, i.e. a caller spatial coordinate corresponding to an instantaneous location of a caller telephone).

Regarding claim 4, Schaffer teaches a method wherein the geographic vicinity of the communications device is determined by decoding the caller location identifier or the initiating switch locator (col. 51 lines 27-30, i.e. looks up latitude and longitude from caller telephone number; and col. 52 lines 49-65).

Regarding claims 5 and 23, Schaffer teaches a method and a system wherein the caller location identifier comprises a caller geodetic location information parameter (CGLIP) (col. 29 lines 1-3, i.e. latitude and longitude geocoded, and col. 29 lines 28-29).

Regarding claims 7, 9, 25 and 27, Schaffer teaches a method and a system wherein the initiating switch locator comprises a jurisdiction information parameter (JIP) and a call reference parameter (CRP) (Fig. 27, 111 Switch, col. 38 lines 63-67, i.e. communication protocols – ISDN and ISUP).

Regarding claims 8, 10, 26 and 28, Schaffer teaches a method and a system wherein the decoding comprises:

- converting the JIP or CRP to a switch ID (Fig. 27, 111 Switch, col. 39 lines 38-40, i.e. uses Local Exchange Routing Guide (LERG) for switch ID);

- converting the switch ID to geographical coordinates (col. 39 lines 33-34, i.e. vertical-horizontal coordinate file); and

- converting the geographical coordinates to latitude and longitude (Fig. 5, col. 23 lines 16-20, i.e., calculating site latitude and longitude).

Regarding claims 11 and 29, Schaffer teaches a method and a system wherein the initiating switch locator comprises a common language location identification (CLLI) code (col. 39 lines 33-40, i.e., CLLI codes are associated with V&H coordinate to

calculate distance between two network locations, and also Local Exchange Routing Guide (LERG) stored CLLI).

Regarding claims 12 and 30, Schaffer teaches a method and a system wherein the decoding comprises:

converting the CLLI code to geographical coordinates (col. 39 lines 33-34, i.e., vertical-horizontal coordinate file associated with CLLI codes, and col. 39 lines 38-40, i.e., also Local Exchange Routing Guide (LERG) stored CLLI); and

converting the geographical coordinates to latitude and longitude (Fig. 5, col. 23 lines 16-20, i.e., calculating site latitude and longitude).

Regarding claims 13 and 31, Schaffer teaches a method and a system wherein the signaling stream is formatted in accordance with an SS7 protocol (col. 16 lines 30-32, i.e., SS7 TCAP message).

Regarding claims 16-18, and 35-36, Schaffer teaches a method and a system wherein the second call center is within the same state as that of the communications device (Fig. 35, 1220, col. 52 lines 2-6, i.e. "within service area"); and the second call center is within the same LATA as that of the communications device (Fig. 27, 111, 150a, col. 38 lines 25-27, and col. 39 lines 1-4, i.e. LEC and service location); and the second call center is within the same time zone as that of the communications device (col. 40 lines 10-20).

Regarding claims 19, and 37, Schaffer teaches a method and a system wherein there is a plurality of call centers closer to the geographic vicinity of the communications device than the first call center, and the second call center is the one call center out of the plurality of call centers that is closest to the geographic vicinity of the communications device (Fig. 22, 109 Service Locations File, col. 40 lines 9-10, lines 14-16, and lines 19-20).

Regarding claims 20, and 38, Schaffer teaches a method and a system further comprising routing the call to a third call center based on the expected wait time at the second call center (Fig. 1E, 152, 154 and 144 – col. 19 lines 6-11, i.e. exception handling when location is “busy”).

Regarding claim 21, Schaffer teaches a system (Fig. 27, Fig. 30) for routing a call from a communications device (Fig. 27, 110, Fig. 30, 110) to a call center (Fig. 27, 1000, Fig. 30, 1000 Call Center), comprising:

a switch (Fig. 27, 111, Fig. 30, 111) for routing a call to a first call center (Fig. 27, 1000, 1130 Network Terminating Point Interface Box to Call Center 1000, Fig. 30, 1000, 1130) based on a communication device identifier (Fig. 27, col. 38 lines 49-51, i.e., ANI is “communication device identifier”, Fig. 28, col.40 lines 63-67 through col. 41 lines 1-3);

an interface for receiving at a first call center a signaling stream associated with the call (Fig. 27, 1130, Fig. 30, 1130 Network Terminating Point Interface), the signaling stream including at least a communications device identifier and a caller location identifier or an initiating switch locator (Fig. 27, 111, Fig. 30, 111 Network Switch), the caller location identifier identifying the geographic vicinity of the caller, and the initiating switch locator identifying the geographic vicinity of the switch through which the call is initially being routed (Fig. 27, Fig. 30, col. 10 lines 45-49, i.e., caller spatial coordinate, col. 38 lines 28-29, col. 40 lines 66-67 through col. 41 lines 1-3, i.e. ANI);

a database for relating the caller location identifier or initiating switch locator to the geographic vicinity of the caller or initiating switch, respectively (Fig. 27, 1134-1140, Fig. 30, 1134-1140, i.e. database server, NPA-NXX split file, phone database, and location table, col. 44 lines 30-61); and

a processor (Fig. 27, 1150, Fig. 30, 1150 Routing Processor) for retrieving the geographic vicinity of the caller or initiating switch, for determining a second call center closer to the geographic vicinity of the caller location or initiating switch location, and for routing the call to that second call center (Fig. 27, Fig. 30, 1150, 1010, 1214 and 1216, i.e. routing processor, phone number latitude/longitude table, service area file, col. 42 lines 30-40).

Regarding claim 39, Schaffer teaches a method for routing a call from a communications device to a call center (Fig. 27, 110 Calling “communication device”, 1000 Call Center), comprising:

receiving at a first call center a call from a caller via a communications device (Fig. 27, 110, 1000, 1130), the call center comprising at least one operator (Fig. 27, 1146 OPERATOR) capable of communicating with the caller by voice (Fig. 27, 38 lines 25-26, col. 39 lines 51-52, i.e., caller will be connected to an operator, and col. 8 lines 66-67 through col. 9 lines 1--3. i.e., operator is a "live operator");

determining the geographic vicinity of the communications device (Fig. 27, 1136, 1138, col. 39 lines 33-40, i.e. Bellcore's Vertical & Horizontal Coordinate file and Local Exchange Routing Guide (LERG), and Figs. 39A-B, state 1452, col. 51 lines 27-30. i.e. latitude and longitude; and

routing the call to a second call center if that second call center is closer to the geographic vicinity of the communications device than the first call center (Fig. 27, 150a-150b, col. 39 lines 1-4, and col. 52 lines 2-6).

Regarding claims 40-42, Schaffer teaches the method wherein: the at least one operator (Fig. 27, 1146 OPERATOR) comprises a human (Fig. 27, 38 lines 25-26, col. 39 lines 51-52, i.e., caller will be connected to an operator, and col. 8 lines 66-67 through col. 9 lines 1--3. i.e., operator is a "live operator"); the at least one operator comprises at least one processor (Fig. 27, 1150 ROUTING PROCESSOR, col. 39 lines 57-63); and the at least one operator comprises at least one software application (Fig. 27, 1130, col. 39 lines 6-9, and lines 17-20, i.e., software application provided by Oracle Corporation).

Claim Rejections - 35 USC § 103

7. Claims 6 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer as applied to claims 5 and 23 above, and in view of Hurst (U.S. Pub. No. 2003/0087647 A1).

Regarding claims 6 and 24, Shaffer discloses everything claimed as applied above (see claims 5 and 23). However, Shaffer does not specifically disclose the additional WGS format, which can be used to convert the location information in the WGS84 format to latitude and longitude.

In the same field of endeavor, Hurst teaches a location calculation software translates the caller ID to a geographical coordinate such as WGS84 (Hurst – U.S. Pub. 2003/0087647 A1 - paragraph [0037]). The advantage of Hurst is location data on a large number of mobile devices can be obtained in real time, and without additional burden on the network (Hurst – U.S. Pub. 2003/0087647 A1 - paragraph [0141]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide Shaffer with the converting the location information in WGS format to latitude and longitude.

8. Claims 14-15, and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer as applied to claims 3 and 21 above, and in view of Pogossiants et al. (U.S. Pub. 2001/0028649 A1 hereinafter “Pogossiants”).

Regarding claims 14-15 and 32-33, Schaffer discloses everything claimed as applied above (see claims 3 and 21). However, Cave fails to specifically disclose their invention in detail about the call center can convert traditional voice data (PSTN – PCM format) to IP format (Voice-over-Internet Protocol (VoIP)) and the appropriate IP signaling protocols (i.e. H.323 and Session Initiation Protocol (SIP), and these protocols are well known in the art). Although Shaffer has described in the detail the computer-interface applications (Shaffer – col. 6 lines 23-67), and Computer Telephony Integration (CTI) (Shaffer – col. 38, section IX).

In the same field of endeavor, Pogossiants discloses a system comprises of formatting the content of the call to a VoIP protocol (Pogossiants – Fig. 3, paragraph [0052] lines 1-13) and supporting H.323 and SIP protocols (Pogossiants – paragraph [0015]). The advantage of Pogossiants' system is the combining of a telephony network and a data-packet network (Pogossiants – paragraph [0026]).

Therefore, it would have been obvious to person of ordinary skill in the art at the time the invention was made to provide Schaffer with the detail of VoIP protocol and the related signaling protocols H.323 and SIP, as taught by Pogossiants, in order to enhance Schaffer's computer-interface applications.

Response to Arguments

9. Applicant's arguments filed December 14, 2007 have been fully considered but they are not persuasive.

Regarding claim 1, Applicant argues that Schaffer does not teach or suggest a call is being routed to the call center based on a "communication device identifier" (See page 10 of Applicant's Remarks section).

Examiner respectfully disagrees because Schaffer clearly discloses that the call is being routed to the call center based on a communication device identifier (See Figs. 27-28, column 38 lines 49-51 and column 40 lines 63-67 through column 41 lines 1-2 of Schaffer for reference to the terminating switch 111 has routed a call based on the Automatic Number Identification (ANI) between the network and the call center (i.e., ANI is the "communication device identifier" as claimed in claims 2 and 22 of this instant application)). In addition, Schaffer discloses a system that utilizes ANI to identify the calling party (See Schaffer's Abstract lines 8-9), and a method for routing all published/unpublished telephone numbers, mobile phones, and public payphones (See Schaffer column 8 lines 53-56). Therefore, claim 1 and its dependent claims are anticipated by Schaffer.

Claim 21 has been amended with a feature "a switch for routing a call to a first call center based on a communication device identifier". Therefore, the arguments are moot in view of the new ground(s) of rejection for claim 21 and its dependent claims. However, Schaffer does disclose "a switch for routing a call to a call center based on a communication device identifier" as shown above.

Regarding dependent claims 6, 14-15, 24, and 32-33, the discussion above regarding claims 1 and 21 is applicable here as well, and therefore the combination of

Schaffer, Hurst, and Pogossiants as used in the rejections above, does teach the claimed invention.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI N. NGUYEN whose telephone number is (571)270-3141. The examiner can normally be reached on Monday - Thursday 6:30AM - 5:00PM.

Art Unit: 2614

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad F. Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. N. N./
Examiner, Art Unit 2614

03/14/2008